Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
2008 Coastal California JALBTCX Natural Color Imagery

1.2. Summary description of the data:
The mosaic image contained in this file is comprised of RGB imagery collected by the Leica ADS40 sensor along the coast of California. Data coverage generally extends along the coastline from the waterline inshore 500 meters. The sensor produces 12-bit data with three color bands that are not generally in a format accessible to most Geographical Information Systems (GIS). Specialized in-house and commercial software packages processes the imagery data into GIS-compatible products for visualization and further analysis. Horizontal positions, provided in decimal degrees of latitude and longitude, are referenced to the North American Datum of 1983 (NAD83). Vertical positions are referenced to the NAD83 ellipsoid and provided in meters. The National Geodetic Survey's (NGS) GEOID09 model is used to transform the vertical positions from ellipsoid to orthometric heights referenced to the North American Vertical Datum of 1988 (NAVD88). Imagery have been ortho-rectified and mosaiced into boxes that extend approximately 5 km along shore. The file index is provided by the shape file, "CA_boxes" and the numbers used to identify files are in the "Box" field of the shape file. The data file naming convention is based on the year, project, area name, "Box" number, and product type. An example file name is "2009_NCMP_CA_###_RGB_ADS40.tif," where (2009) is the year of data collection, (NCMP) is the project under which data were collected, (CA) is the area of data collection, (###) is the "Box" number, and "(RGB_ADS40) " is the product type.

Original contact information:

Contact Org: JALBTCX

Title: Data Production Manager

Phone: 228-252-1121

Email: shoals-info@sam.usace.army.mil

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:
2010-10-01 to 2010-10-26

1.5. Actual or planned geographic coverage of the data:
W: -119.5288, E: -117.0936, N: 34.4147, S: 32.5211

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Image (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Process Steps:

- EarthData utilized an InfoTerra Pixel Factory workflow for processing the aerotriangulation for the orthoimagery covering the project area. The airborne GPS data was processed and integrated with the inertial measurement unit (IMU). The resulting imagery and control were imported into the InfoTerra Pixel Factory system for use in the aerotriangulation. The ADS40 imagery was downloaded onto the EarthData server and brought over to the UNIX basedInfoTerra Pixel Factory system. The ground control was used in conjunction with the processed airborne global positioning system (ABGPS) results for the aerotriangulation. The ground control points were read in all available imagery and tie points between flight lines were selected. A fully analytical bundle adjustment was run. The properly formatted InfoTerra Pixel Factory results were used for subsequent processing. All final results were output into an AT report which is being delivered with the final orthoimagery."

- InfoTerra Pixel Factory was used in the processing of the DSM for orthorectification of the imagery covering the Orchard Hills Training Site, Idaho project area. InfoTerra Pixel Factory digital surface modeling is based on an auto correlated pixel-matching system within the InfoTerra Pixel Factory software. The auto correlated digital surface model (DSM) surface represents the initial surface model. The following is the process used. 1. Using the DSM InfoTerra Pixel Factory data set created, the technician performed a visual inspection of the data to verify that the flight lines met correctly. The technician also verified that there were no voids, and that the data covered the project limits. The technician then selected a series of areas from the dataset and inspected them where adjacent flight lines met. 2. This DSM surface is used in the rectification of the orthoimagery.

- The digital orthophotography is comprised of 24 bit natural color RGB bands and a 0.30 meter pixel resolution ground orthos for the project area. The InfoTerra Pixel Factory was used in the generation of the orthoimagery covering all project tiles. The radiometric adjustments and color balancing were performed on the raw 16 bit

format imagery for each flight line prior to the import to the Pixel Factory. FEDI uses proprietary software developed specifically to adjust the radiometry of the imagery of the push broom three lines scanner such as the ADS40. The rectification process was then run using the processed DSM surface and the radiometrically balanced imagery on each flight line. The quicklook (reduced resolution rectification) ortho for all flight lines then used to generate the automatic mosaic lines. . which were placed, to mosaic the full resolution ortho of the ADS40 imagery strips. An initial QA/QC was performed by the technician to ensure that the mosaic lines were appropriately placed and that there was appropriate imagery coverage. The final imagery data set is removed from the InfoTerra environment in a process called """"packaging"""" where the individual tiles are created. All data processing in the InfoTerra system is performed in UTM meters; it is during packaging that final datum and projection are defined. The created tiles are reviewed again for anomalies and interactive radiometric adjustment applied where needed. QA/QC was performed looking for anomalies, smears and other indications of problems within the digital Orthophoto creation process, interactive radiometric adjustment applied where needed. Two additional radiometric adjustments are applied to the completed orthos in Adobe Photoshop. The first is a sharpening mask filter; this filter is used to help increase sharpness of a digital image. The basis for this filter is to locate pixels that differ in value from surrounding pixels by the threshold specified. It then increases the pixels' contrast by the value identified. For neighboring pixels specified by the threshold, the lighter pixels get even lighter and the darker pixels get even darker based on the specified amount. The changes made maintained the integrity of the original histogram curve.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation
The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?
No

6.1.1. If metadata are non-existent or non-compliant, please explain:
Missing/invalid information:
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?

- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/49482

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/imagery/search/where:ID=435
https://coast.noaa.gov/htdata/raster2/imagery/CoastalCA_RGB_2009_435

7.3. Data access methods or services offered:

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection
The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.